REMARKS

Priority Claim

The present application makes priority claims to U.S. Provisional Application 60/404,419, filed August 19, 2002, U.S. Provisional Application 60/422,704, filed October 31, 2002, and U.S. Provisional Application No. 60/448,596, filed February 19, 2003. The office action asserts that the application has not complied with 35 USC 119 with respect to the domestic priority claim to the first of these provisional applications, 60/404,419. The applicant emphatically points out that all requirements have indeed been satisfied to claim the benefit of each of the provisional applications. If the examiner does not believe that the applicant has satisfied any specific statute or rule in making these priority claims, the applicant respectfully requests that such statute or rule be identified.

Information Disclosure Statement

The examiner states that a copy of one of the references, Murthi, identified on a previously submitted form PTO-1149, was missing. An additional form PTO-1449 is attached again identifying Murthi, along with a copy of the reference. With regard to claims 1 and 88 and their dependent claims, the Murthi does not disclose or suggest, for example, computing parameters associated with one or more groups of users as well as computing personalized parameters for a user using the parameters associated with that user's group of users and a history of ratings of items by that user. With regard to claim 84 and its dependent claims, Murthi does not disclose or suggest, for example, identifying similar users to a first user using computed personalized statistical parameters for the users in a group, where the personalized statistical parameters for each of one or more individual users in the group are computed using parameters associated with the group and a history of ratings of the items by that user.

Claim amendments

A number of typographical errors in claims have also been addressed through amendments. The remaining amendments address rejections, objections, or other requirements made in the office action mailed , in accordance with MPEP 708.02 VIII – Special examination procedures (C).

The method claims have been amended such that each includes at least one step performed on a computer. These claims satisfy the requirements of 35 USC 101.

The applicant has also amended claims to address the lack of clarity pointed out by the examiner, without intending to change the scope of the claims. With regard to the recitation of "prior probability distributions," "posterior probability distribution," and "expected information," the applicant notes that these terms are used in their conventional manner in the field of statistics, and the claims have been amended to lend further clarity consistent with this conventional usage.

The amendments to the claims do not change the claimed subject matter, and therefore the examiner's request in item c. for a renewed detail discussion of the references is moot.

Rejections over prior art

Claims 1-4, 7-16, 19-26

Claims 1-4, 7-16, and 19-26 stand rejected as anticipated by Crotts (Managing Service Quality 10(6), 2000), which generally discloses a correlation between cultural traits of survey respondents and their tendency to be more or less critical in rating services they have received.

The examiner states that in Crotts, "national cultural differences were shown to influence satisfaction measures and loyalty measures," and that this anticipates "computing parameters characterizing predicted ratings" recited in claim 1. The applicant respectfully disagrees with the examiner's position. Crotts does not disclose or suggest the recited step of "computing parameters characterizing ratings." Rather, Crotts is concerned with determining which demographic factors might influence the honesty of ratings, so that the users of those ratings (e.g., airlines) might be better equipped to interpret them. Furthermore, Crotts does not disclose *computing* the parameters (national cultural differences) that are used to establish expected

influences (more or less critical ratings) – the reference merely observes what those parameters are. The computation in Crotts is only to demonstrate the correlation between the observed parameters and the observed ratings, to confirm the predictions of the authors, not to establish any predictions based on the parameters.

Furthermore, in addition to the reasons given above, the applicant has also amended the last clause of claim 1 to recited "calculating parameters characterizing ratings ... using the personalized statistical parameters," which is also missing from Crotts.

Regarding claims 12-15, the examiner has not afforded any patentable weight to these claims. These claims are patentable for at least the reasons for which claim 1, on which they depend, is patentable. Furthermore, these claims properly limit an element of claim 1, and therefore provide a patentable distinguishing feature over that claim.

Claims 1, 5, 6, 12-15, 20-28, 56, 78-80, 88

Claims 1, 5, 6, 12-15, 20-28, 56, 78-80, and 88 stand rejected as anticipated by Hey (US Pat. 4,870,579), which generally discloses an approach to predicting an individual's rating of an item based on actual ratings of that item by specific other individuals who rated other items similarly to the subject individual.

The examiner states that in Hey, "the entire group may be used" (col. 6, ll. 48-57), for "computing parameters associated with the groups" as in claim 1. The applicant respectfully disagrees. Hey explains that when it says "the entire group" or "a subset of the group" may be used, it means that "successive ones of the users are designated as selected users while the remainder of the subset are designated as recommending users" (emphasis added). Comparing each member of a group, one at a time, to each other member, even if all members are eventually compared, does not disclose or suggest "computing parameters associated with the one or more groups." Further, Hey does not disclose or suggest "computing parameters characterizing ratings of items by users in the group." Rather, it only predicts ratings by each *individual* user based on actual ratings by other users.

The examiner also states that in Hey, "predicting user reaction based on other users in a group..." anticipates "computing personalized statistical parameters for each user using the

parameters associated with the group." The applicant respectfully disagrees. As stated above,

Hey predicts each users reaction based on comparison of each member of a group with each

other member. For example:

> A value for each pair representing the difference in ratings for items sampled by
> both members of each successive pair is provided to weighting module 18. For
> persons designated as predicting persons for the selected person ... a weighting
> value is assigned based on the difference in ratings between that predicting person
> and the selected person. The weighting values are provided to prediction
> adjustment module 20 which applies the weighting values to items unsampled by
> the selected person to proportionally alter the difference between a rating
> previously predicted for the selected person for each unsampled item and the
> rating of that item by the predicting persons. The rating previously predicted for
> each unsampled item represents the predicted reaction of the selected person to
> the up-to-now unsampled item.

(col. 4, ll. 42-57, emphasis added). Hey does not compute "parameters associated with the one or

more groups," and thus any statistical parameters it may compute for each user are not based on

parameters associated with the group.

The dependent claims are each patentable for at least the reasons for which the claims on

which they depend are patentable.

Claims 17, 18, 38-42, 57-77, 81-83

Claims 17, 18, 38-42, 57-77, 81-83 stand rejected over Hey in view of official notice that

> consideration and/or adjusting data based on risk, i.e., development,
> regulatory approval, intellectual property protection, etc., are well known in
> the marketing field in order to provide a robust or complete analysis of
> marketing data. For example, a routineer in the data analysis field would
> consider that an item having a high start up cost may not get to market even
> though a user has expressed an interest in the item.
> ***
> the timing or frequency of computing parameters is within the level of
> ordinary skill of a routineer in the field of statistical data analysis and is a
> matter of choice dependent upon the type and quantity of data that is analyzed.
> ***
> computing accomplished during a user session or off-line are within the level
> of ordinary skill of a marketing professional in the field of marketing strategy
> to best serve the marketing campaign or marketing strategy of an organization.
> ***

recommending a subset is within the level of ordinary skill of a routineer in the field of marketing and is a matter of choice dependent upon the items and the marketing strategy behind the recommendation.
***
computing a score [by combining rating and quantity] is within the level of ordinary skill of the data analyst in the field of marketing to analyze the data in relationship to other data and to better represent items relative to each other as determined by a marketing strategist of ordinary skill in a particular industry.
***
consideration and/or weighting based on external preferences not associated with an item user, e.g., environmental regulatory, cost, transportation, and other factors, are well known the in marketing field in order to provide a robust or complete analysis of marketing data.

The applicant disagrees that it is appropriate to take official notice of any of these items. These assertions are not "capable of such instant and unquestionable demonstration as to defy dispute." *In re Ahlert*, 424 F.2d 1088, 1091 (CCPA 1970).

Each of these dependent claims is patentable for at least the reasons for which the claims on which they depend is patentable, and further adds patentable features that are not disclosed or suggested in the cited references.

Claims 29-37, 43-55

The dependent claims are patentable for at least the reasons for which the claims on which they depend are patentable.

Claims 84-87, 89

Claims 84-87 and 89 stand rejected as obvious over Sutcliffe (US Pat. 6,052,122). The examiner argues that the description of the match-making service described in Sutcliffe discloses a number of the elements of claim 84. The applicant respectfully disagrees. Sutcliffe describes a system in which a user enters criteria he would find desirable in another person, and the system searches its database of characteristics that people (including the user) have entered about themselves to find a match. In contrast, claim 84 describes a system in which users are identified as similar based on how each of them has rated other items. Sutcliffe does not describe or suggest the following features of claim 84:

- "maintaining, in a computer-accessible format, a history of ratings of items by users in a group of users" – the identification by Sutcliffe's user of his own characteristics or those of another user is not a "rating of [an] item." The characteristics and criteria specified in Sutcliffe ("e.g., gender, drinking habits, etc.") are attributes that might contribute to a user's rating of an item, but are not themselves items to be rated.

- "on a computer, computing parameters using the history of ratings, said parameters being associated with the group of users" – Sutcliffe does not compute parameters associated with a group of users.

- "said parameters ... enabling computation of a predicted rating of any of the items by an unspecified user in the group" – an identified similarity of two users and a predicted rating of items by a user are two separate elements. Sutcliffe does not predict a rating by a user of anything. Even if identification of a match between two users could be regarded as a prediction of a favorable rating by one user of the other, Sutcliffe does not describe or suggest predicting such a rating by an unspecified user in a group.

  Further, the examiner has previously associated the "items" of claim 84 with the "characteristics and criteria" of Sutcliffe. She cannot also associate the "items" with the users to be matched, in contradiction of both the language of claim 84 and her previous argument.

- "on a computer, computing personalized statistical parameters for each of one or more individual users in the group" – Sutcliffe uses criteria as entered to directly generate a search string. It does not describe or suggest computing personalized statistical parameters for each user.

- "using the parameters associated with the group" – Sutcliffe does not associate any parameters with a group.

- "said personalized parameters enabling computation of a predicted rating of any of the items by that user" – as above, Sutcliffe does not disclose or suggest personalized

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parameters other than the criteria entered by a user, and does not compute a predicted rating of an item. The users to be matched in claim 84 are not the items to be rated.

- "identifying similar users to a first user using the computed personalized statistical parameters for the users" – although Sutcliffe identifies similar users to a first user, it does so based on a direct match between the criteria of the first user and the characteristics of the identified user. It does not describe or suggest doing so using "computed personalized statistical parameters."

Claim 89 is patentable for at least the reasons for which claim 84 is patentable, and the dependent claims are patentable for at least the reasons for which the claims on which they depend are patentable.

The fact that the applicant has not addressed all the arguments and positions put forth in the office action is not a concession that the applicant agrees with any or all of those positions and arguments. In addition, there may be other reasons for the allowability of the pending claims or other claims.

Please apply any charges or credits to deposit account 06-1050.

Respectfully submitted,

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